## HIGH FREQUENCY

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## Fall is a Time for Change and Tradition

Scott L. Spencer Publisher



The homas Perkins has joined our staff as Senior Technical Editor. Tom is already well known to many in our community for his technical acumen, broad base of contacts, and industry achievements.

Most recently he was a Senior Principal Engineer at BAE Systems where he managed the Microwave Module Design Group working on major programs such as F/A-22 EW suite, and F-35 Joint Strike Fighter. His work involved advanced microwave packaging techniques including multi-layer organic and Low Temperature

Co-Fired Ceramic (LTCC) and the development of high power amplifiers using Gallium Nitride (GaN) Transistors.

Tom led a design group responsible for low and high power PIN diode switches, high power limiters, phase shifters, and stepped attenuators, and developed components for high reliability space satellite programs. He has designed waveguide filters, multifunction microwave integrated circuit (MIC) modules, high power shipboard microwave transmitter components and antenna systems.

Tom has been awarded three patents including two related to the Rapid Prototyping of Monolithic Microwave Integrated Circuits. He has three pending patents for a LTCC T/R Module utilizing Ball Grid Array Technology, an X-Band Turnstile Antenna, and an X, Ku, and K Band Omni-Directional Antenna.

Tom is a Life Member of the IEEE, and has been MTT-S Chair in New England. He is Vice Chair of NH MTT-S, Co-Chair of the NH IEEE Life Members Chapter, and is active in the Association of Old Crows. He holds a BSEE degree from Monmouth University and is the author of numerous technical papers and articles. We are fortunate to have a person of Tom's ability and accomplishments on our team.

For the past 14 years I have attended European Microwave Week beginning in 1998 with the meeting in Amsterdam. European Microwave Week has become a premier microwave event in Europe. The Week is organized around three conferences: the European Microwave Conference (EuMC), the European Microwave Integrated Circuits Conference (EuMIC) and the European Radar Conference (EuRAD).

Alongside the Conference is the European Microwave Exhibition, which has grown into one of the largest microwave and RF trade shows in Europe. The event provides a unique opportunity to keep up to date with recent achievements in RF, microwave and millimeter-wave technology, and to network and learn from experts in a wide variety of specialties, including passive components, active devices, antennas, systems, test and measurement, and EM theory and automated design and simulation techniques. This year the event was held in the UK at the Manchester Central Convention Complex near Albert Square and Manchester's Town Hall, a lovely Victorian-era, Neogothic building where in the vestibule can be found life size statues of James Joule and Michael Faraday.

The sessions were well attended, and the exhibit hall was full of activity. The unanimous sentiment was that the event exceeded all expectations.

Several companies introduced noteworthy new products on the exhibit floor, many of which can be found in the new products section of this issue.

Aeroflex introduced an extension to their PXI 3300 series of modular instruments. The 3036 RF Digitizer module with extended frequency range to 13 GHz is targeted toward vector signal analysis in devices used in high performance wide band communication systems.

Analog Devices showcased the ADF41020 PLL (phase-locked loop) frequency synthesizer with an operating bandwidth up to 18 GHz which is designed for use with local oscillators in the frequency conversion sections of wireless receivers and transmitters.

Applied Wave Research provided attendees with a preview of AWR 2011 Microwave Office/AXIEM and Visual System Simulator as well as conducting a number of useful MicroApps workshops.

Computer Simulation Technology previewed a new 3D multilayer solver in their CST MICROWAVE STUDIO version 2012.

Valpey Fisher took advantage of the Manchester event to introduce a low jitter ultra-small VCO in a 2.5 x 2.0 mm SMD package.

National Instrument's President and CEO, Dr. James Truchard, was on hand to discuss the recent acquisitions of Phase Matrix and Applied Wave Research as well as the many advantages offered by NI's PC based PXI architecture for test, measurement and control. Dr. T, as he is known, is an individual of rare intellect who easily moves between complex electrical engineering discussions to particle physics to synthetic elements, metallurgy and beyond. It is easy to see how NI has grown and prospered under his guidance.

For those who were not able to attend this year's event, I encourage you to plan ahead and make arrangements for next year in Amsterdam. You will not be disappointed.